

SEQUENCE LISTING

<110> Roche Vitamins AG

<120> DNA encoding FAD dependent D-erythronic acid
4-phosphohate dehydrogenase involved in vitamin B6
biosynthesis

<130> sequence for pdxR (case19)

<140>

<141>

<160> 4

<170> PatentIn Ver. 2.1

<210> 1

<211> 1491

<212> DNA

<213> *Sinorhizobium meliloti*

<400> 1

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<212> PRT

<213> *Sinorhizobium meliloti*

<400> 2

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Met Thr Thr Val Leu Pro Ser Pro Glu Leu Ile Ala Ser Phe Val Asp
             20             25             30

```

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Ile Val Gly Pro Gly Asn Ala Leu Thr Ala Pro Ala Asp Thr Ala Pro
             35             40             45

```

```

Tyr Leu Val Glu Ser Arg Gly Leu Tyr Arg Gly Thr Thr Pro Leu Val
             50             55             60

```

```

Leu Arg Pro Gly Ser Val Glu Glu Val Ser Leu Val Met Arg Leu Ala
             65             70             75             80

```

```

Ser Gln Thr Arg Thr Ala Val Val Pro Gln Gly Gly Asn Thr Gly His
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Val Ala Gly Gln Ile Pro Arg Glu Gly Lys Ala Asp Val Val Leu Ser
            100            105            110

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Leu Glu Arg Leu Asn Arg Ile Arg Asp Ile Asp Pro Val Gly Asn Val
            115            120            125

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Ile Val Ala Asp Ala Gly Cys Ile Leu Ala Asp Ile Gln Lys Ala Ala
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Asp Asp Val Asp Arg Leu Phe Pro Leu Ser Leu Gly Ser Glu Gly Ser
 145 150 155 160

Ala Arg Ile Gly Gly Asn Leu Ser Thr Asn Ala Gly Gly Thr Ala Val
 165 170 175

Leu Ala Tyr Gly Asn Met Arg Gln Leu Cys Leu Gly Leu Glu Val Val
 180 185 190

Leu Pro Thr Gly Glu Ile Trp Asp Gly Leu Arg Arg Leu Arg Lys Asp
 195 200 205

Asn Thr Gly Tyr Asp Leu Arg Asp Leu Phe Ile Gly Ala Glu Gly Thr
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Leu Gly Val Ile Thr Gly Ala Val Leu Lys Leu Phe Pro Lys Pro Arg
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Gly His Gln Val Ala Phe Ala Gly Leu Arg Ser Val Glu Asp Ala Leu
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Thr Leu Phe Asp Arg Ala Thr Ser Val Cys Gly Pro Ala Leu Thr Gly
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Phe Glu Leu Met Pro Arg Leu Gly Ile Glu Phe Thr Thr Arg His Ile
 275 280 285

Ala Gly Val Arg Asp Pro Met Glu Thr Thr His Pro Trp Tyr Ala Leu
 290 295 300

Ile Asp Ile Ser Thr Ser Asp Thr Ala Glu Ser Ala Glu Arg Met Val
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Gln Asp Leu Leu Glu Ala Val Ile Ala Asp Gly Leu Val Glu Asn Ala
 325 330 335

Val Ile Ala Gln Asn Glu Ala Gln Arg Arg Ala Leu Trp His Met Arg

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Glu Ser Met Ser Pro Ala Gln Lys Pro Glu Gly Gly Ser Ile Lys His					
355		360		365	
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Asp Ala Leu Val Ser Lys Ala Ile Pro Gly Ala Arg Ile Cys Ala Phe					
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Gly His Met Gly Asp Gly Asn Ile His Tyr Asn Ile Ser Gln Pro Val					
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Gly Ala Asp Lys Gln Ser Phe Leu Asp Arg Trp Arg Glu Ile Asn Ala					
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Ile Val His Ala Val Val Leu Lys His Asp Gly Ser Ile Ser Ala Glu					
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His Gly Ile Gly Gln Leu Lys Arg Asp Glu Leu Ala Ala Ile Arg Ser					
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Pro Ile Glu Ile Glu Leu Met Arg Arg Ile Lys His Ala Phe Asp Pro					
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<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:an artificially

synthesized primer sequence

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<210> 4

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

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